

CLAIMS

I claim:

1. A control system for a vehicle, comprising:

a plurality of sensor assemblies mounted on a frame of said vehicle, each of said sensor assemblies including a first strain sensor generating a strain indicative signal indicative of strain on said frame; and,

an electronic control unit for controlling an operation of a component of said vehicle responsive to said strain indicative signals.
2. The control system of claim 1, further comprising a throttle position sensor that generates a throttle position indicative signal, said electronic control unit controlling operation of said component responsive to said strain indicative signals and said throttle position indicative signal.
3. The control system of claim 1, further comprising a steering angle sensor that generates a steering angle indicative signal, said electronic control unit controlling operation of said component responsive to said strain indicative signals and said steering angle indicative signal.
4. The control system of claim 1, further comprising an accelerometer that generates an acceleration indicative signal, said electronic control unit controlling operation of said component responsive to said strain indicative signals and said acceleration indicative signal.

5. The control system of claim 1, further comprising a vehicle speed sensor that generates a speed indicative signal, said electronic control unit controlling operation of said component responsive to said strain indicative signals and said speed indicative signal.

6. The control system of claim 1, further comprising a wheel end ABS sensor that generates a brake indicative signal, said electronic control unit controlling operation of said component responsive to said strain indicative signals and said brake indicative signal.

7. The control system of claim 1 wherein said component comprises a shock absorber.

8. The control system of claim 1 wherein said component comprises a torsion rod coupled to said frame.

9. The control system of claim 1 wherein said component comprises a wheel brake of said vehicle.

10. The control system of claim 1 wherein said component comprises a throttle valve.

11. The control system of claim 1 wherein said component comprises an indicator that provides an indication of a characteristic of said vehicle to an operator of said vehicle.

12. The control system of claim 1 wherein one sensor assembly of said plurality of sensor assemblies is disposed proximate each wheel of said vehicle on one of first and second longitudinal rails of said frame.

13. The control system of claim 1 wherein one sensor assembly of said plurality of sensor assemblies is disposed on a cross member of said frame between first and second longitudinal rails of said frame.

14. The control system of claim 1 wherein at least one of said plurality of sensor assemblies includes a second strain sensor generating a strain indicative signal indicative of strain on said frame.

15. The control system of claim 1 wherein each of said sensor assemblies includes a metal substrate coupled to said frame.